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COMMONWEALTH of MASSACHUSETTS
DIVISION of FISHERIES & WILDLIFE

Nongame Wildlife for Special Consideration in Massachusetts

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NONGAME WILDLIFE FOR SPECIAL CONSIDERATION IN MASSACHUSETTS

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MASSACHUSETTS DIVISION OF FISHERIES AND WILDLIFE

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INTRODUCTION

This document lists native nongame vertebrates recognized by the Massachusetts Division of Fisheries and Wildlife as warranting special consideration. Species, subspecies or forms listed herein range from those which are designated as "threatened" or "endangered" by the United States Fish and Wildlife Service to others that are local or rare in the Commonwealth. The list is primarily intended to serve as a guideline for the Massachusetts Division of Fisheries and Wildlife for potential management of these species. In addition, it serves as a reference list for other state or Federal agencies, conservation groups, planners, developers, and the general public.

Faunal surveys of Massachusetts compiled by Division biologists in 1979 indicate that approximately 640 vertebrate species have been recorded in the Commonwealth (Blodget, B. G., List of the Birds of Massachusetts, 2nd ed.; Cardoza, J. E. and P. G. Mirick, List of the Reptiles and Amphibians of Massachusetts; Cardoza, J. E., List of the Mammals of Massachusetts, 2nd ed.; and Halliwell, D. B., List of the Freshwater Fishes of Massachusetts). In developing this list of vertebrates for special consideration, all species not typically taken by hunters, fishermen, or trappers were reviewed. These species, collectively termed "nongame," account for 83 percent (533 species) of the Commonwealth's fauna. Game species are not included in this list since they are already under management.

After review by the Division, and after consultation with various individuals and organizations, the nongame species listed herein were found to be in need of special consideration. Listed species are divided among three sections: Section I (Threatened and Endangered Species), Section II (State Local and State Rare Species) and Section III (Peripheral Species).

It is expected that species, subspecies or morphologically distinct populations may be added, deleted and shifted from category to category as knowledge about them changes. The Division monitors these species and requests and encourages submission of additional data on all species. Suggestions for addition or deletion, or for changes in category classification will be accepted by the Division in the form of written petitions. Procedures for submitting such a petition are outlined below under "Revision Procedure."

In designating these species for special consideration, the entire geographic range of the organism has been considered. It should be understood that the political boundaries of Massachusetts are superimposed upon the natural ranges of wildlife populations. Thus, many species that are rare or accidental in Massachusetts are neither rare nor endangered over their entire range, a fact that is frequently overlooked or misunderstood.

Within Massachusetts' boundaries, there are several zones of biotic transition. As a result, many species which are common in adjoining biotic zones breed irregularly in the Commonwealth. These peripheral species may only periodically breed in the state due to normally fluctuating range limits. For example, the northernmost breeding area of the Hooded Warbler (Wilsonia citrina) fluctuates between southern Bristol County, Massachusetts, and adjacent Rhode Island. Similarly, the Rusty Blackbird (Euphagus carolinus) occasionally breeds in northern Berkshire County. These are natural fluctuations and, while such populations are of interest, they are distinctly different from, and of less concern than, established breeding species that appear to be declining. Nevertheless, some peripheral species may be undergoing permanent range expansion and may become established in the Commonwealth.

Preliminary studies have demonstrated that many nongame species benefit from management, including traditional game management. Currently, some management efforts specifically aimed at nongame species are underway, but there is a need to coordinate and implement more effective programs to investigate and conserve species that have been determined to be in need of special consideration.

More detailed information on the distribution of wildlife listed herein, as well as a companion document entitled "Native Plants for Special Consideration in Massachusetts,"[1] are available from the Massachusetts Division of Fisheries and Wildlife, 100 Cambridge Street, Boston, Massachusetts 02202.

REVISION PROCEDURE

In any listing of species of this type, it is expected that changes will be needed from time to time. This list is based on current knowledge and will be subject to revision as circumstances change and as knowledge about the species increases. Submission of additional data is requested and encouraged. Send information to the Massachusetts Division of Fisheries and Wildlife, Nongame Section, Field Headquarters, Westboro, Massachusetts 01581.

Petitions for the addition or deletion of species to and from the list, or for changes in classification of listed species will be accepted by the Division according to the following procedures. Petitions must be in writing, and must contain the date submitted and the name, signature, address, telephone number, and the association, institution or business, if any, represented by the petitioners. Petitions must be sent to the Director, Massachusetts Division of Fisheries and Wildlife, 100 Cambridge Street, Boston, Massachusetts 02202. Petitions submitted for review must address the following points:

(1) Clearly indicate the administrative measures recommended and include the scientific and common name(s) of the species involved;

[1]Sorrie, B. (preparer). 1982. Native Plants for Special Consideration in Massachusetts. Massachusetts Division of Fisheries and Wildlife.

(2) Contain detailed narrative justification for the recommended measure, describing (based on available information) the past and present numbers and distribution in Massachusetts of the species involved. The petition must also point out the particular threats confronting the species;

(3) Provide information on the status of the species over a significant portion of its range; and

(4) Be accompanied by appropriate supporting documentation such as a list of bibliographic references, citations of pertinent publications, copies of written reports or letters from authorities and maps as appropriate.

If the Director determines, after consultation with the staff, that substantial evidence has been submitted to warrant a review of the species' status, he shall refer the petition to the Nongame Advisory Committee for investigation. The Committee, in conducting its investigation, may seek the advice of additional persons and shall advise the Director concerning appropriate action. The Director, after consulting with the staff, shall then forward his recommendation to the Fisheries and Wildlife Board. The Board may then accept or reject such recommendations, or may opt for a public meeting or, in the case of threatened and endangered species, a public hearing.

If the Director finds, with the concurrence of the staff, that substantial evidence has not been presented, the petition shall be denied and the petitioner shall be so notified and advised of the reasons for denial.

July, 1982

SECTION I

THREATENED AND ENDANGERED SPECIES

This section lists wildlife determined to be in need of immediate attention in order to maintain or increase critically low populations. All listed vertebrates are protected by Section 5, Chapter 131 of the Massachusetts General Laws.

Federally listed "Threatened" or Endangered" species have special protection under the Federal Endangered Species Act of 1973. Endangered whales are further protected by the Federal Marine Mammal Protection Act of 1972.

Section 4, Chapter 131 of the Massachusetts General Laws provides that the Massachusetts Division of Fisheries and Wildlife may conduct investigations to determine the status of all the vertebrate wildlife and wild plants in the Commonwealth and to list those species which are uncommon enough to warrant endangered status. Such a list has been established in regulation and is found at 321 Code of Massachusetts Regulations, part 8.01. This list encompasses by reference all species listed by the United States Fish and Wildlife Service and adds those which the Division has recommended for such listing.

Species listed in this section may be threatened by any of the following factors: (1) present or threatened destruction, modification or curtailment of the species' habitat or range; (2) inadequacy of existing regulatory mechanisms resulting in overutilization for commercial, sporting, scientific or educational purposes; or (3) disease, predation or other natural factors affecting the species' continued existence.

Endangered Species (E): any species which is in danger of extinction through all or a significant portion of its range. Species listed under provisions of the Federal Endangered Species Act of 1973 (50 Code of Federal Regulations, sections 17.11 and 17.12) which occur in Massachusetts are included, as well as species which the Division of Fisheries and Wildlife has recommended to the United States Fish and Wildlife Service should be so listed (*). The following 16 species are placed in this category:

Fish

Shortnose Sturgeon (*Acipenser brevirostrum*) E
Connecticut River mainstem below Turner's Falls and rare marine records

Reptiles

Atlantic Leatherback (*Dermochelys coriacea*) E
Marine

Kemp's Ridley (*Lepidochelys kempi*) E
Marine

Atlantic Hawksbill (Eretmochelys imbricata) E
Marine

Plymouth Red-bellied Turtle (*Chrysemys rubriventris bangsi*) E
Restricted to Plymouth County and possibly Essex County

Birds

Bald Eagle (*Haliaeetus leucocephalus*) E
Appears statewide throughout the year with especially notable concentrations in winter in the Connecticut River Valley, Merrimac River Valley and Quabbin Reservation

Peregrine Falcon (*Falco peregrinus*) E
Appears throughout the state, most notably along the coast during fall migration

Eskimo Curlew (*Nunenius borealis*) E
Last verified sighting at Orleans, Barnstable County on September 5, 1913; possibly extinct

Mammals

Indiana Bat (*Myotis sodalis*) E
Recorded historically from Berkshire, Hampden and Worcester Counties; possibly extirpated

Right Whale (*Eubalaena glacialis*) E
Marine

Sei Whale (*Balaenoptera borealis*) E
Marine

Blue Whale (*Balaenoptera musculus*) E
Marine

Fin Whale (*Balaenoptera physalus*) E
Marine

Humpback Whale (*Megaptera novaeangliae*) E
Marine

Sperm Whale (*Physeter macrocephalus*) E
Marine

Plants

Small Whorled Pogonia (*Isotria medeoloides*) E*
Last recorded in 1899 in Hampshire County; by virtue of the fact the Commonwealth lies within the known range, discovery of an extant population is possible.

Threatened Species (T): any species which is likely to become endangered within the forseeable future throughout all or a significant portion of its range. Species listed under provisions of the Federal Endangered Species Act of 1973 (50 Code of Federal Regulations, sections 17.11 and 17.12) which occur in Massachusetts are included, as well as species which the Division of Fisheries and Wildlife has recommended to the United States Fish and Wildlife Service should be so listed (*). The following three species are placed in this category:

Reptiles

Green Turtle (*Chelonia mydas mydas*) T
Marine

Loggerhead (*Caretta caretta caretta*) T
Marine

Plants

Silverling (*Paronychia argyrocoma* var. *albimontana*) T*
Restricted to one station in Essex County

SECTION II

STATE LOCAL AND STATE RARE SPECIES

Breeding, or in some cases, wintering or migratory populations of species in this section could, under certain circumstances, be adversely affected or extirpated from the Commonwealth. Every reasonable effort should be made to avoid adversely affecting these species. All vertebrates listed are protected by Section 5, Chapter 131, of the Massachusetts General Laws.

Species listed in this section, although not threatened or endangered in the same sense as species listed in Section I, may be adversely affected in the Commonwealth by any of the same factors listed in Section I.

State Rare (SR): long-established breeding or wintering species whose populations are either documented to be declining or known to survive in critically low numbers. The following 23 species are listed:

Fish

Atlantic Sturgeon (*Acipenser oxyrhynchus*) SR
Migratory marine populations; freshwater breeding populations undocumented for many years and probably extirpated

Lake Chub (*Couesius plumbeus*) SR
Westfield drainage only

Northern Redbelly Dace (*Phoxinus eos*) SR
Green River (Deerfield drainage) only

Trout-perch (*Percopsis omiscomaycus*) SR
Hoosic and Housatonic drainage; possibly extirpated

Burbot (*Lota lota*)
Connecticut and Housatonic Rivers; possibly extirpated

Threespine Stickleback (*Gasterosteus aculeatus*) SR
Trimorphic freshwater population found in Suffolk County (Charles River drainage) only; marine form abundant

Amphibians

Blue-spotted Salamander (*Ambystoma laterale*) SR
Disjunct and isolated populations in Essex, Norfolk, Middlesex, Worcester, Hampden and Franklin Counties and possibly northwestern Berkshire County

Silvery Salamander (*Ambystoma platineum*) SR
Exact distribution unknown

Tremblay's Salamander (*Ambystoma tremblayi*) SR
Exact distribution unknown

Marbled Salamander (*Ambystoma opacum*) SR
Scattered populations from Berkshire County east to Middlesex, Norfolk and Bristol Counties

Reptiles

Bog Turtle (*Clemmys muhlenbergii*) SR
Recorded from Berkshire County

Eastern Box Turtle (*Terrapene carolina carolina*) SR
Small populations scattered sparingly statewide

Northern Diamondback Terrapin (*Malaclemys terrapin terrapin*) SR
Reaches northern edge of range in Barnstable and Bristol Counties

Northern Copperhead (*Agkistrodon contortrix mokeson*) SR
Norfolk and Hampden Counties only

Eastern Timber Rattlesnake (*Crotalus horridus horridus*) SR
Populations known in Hampden, Hampshire, Berkshire and Norfolk Counties; possibly Franklin County

Birds

Common Loon (*Gavia immer*) SR
Nests only at Quabbin Reservoir

Great Blue Heron (*Ardea herodias*) SR
Known to nest at eight rookeries in Berkshire, Franklin and Worcester Counties

Arctic Tern (*Sterna paradisaea*) SR
Breeding populations restricted mainly to Plymouth and Barnstable Counties

Roseate Tern (*Sterna dougallii*) SR
Nests mainly in Plymouth, Barnstable and Bristol Counties

Golden-winged Warbler (*Vermivora chrysoptera*) SR
Nests at scattered stations statewide except southeastern Massachusetts

Northern Parula (*Parula americana*) SR
Remnant breeding population in Barnstable County

Mammals

Gray Seal (*Halichoerus grypus*) SR
Nantucket County, occasionally Barnstable and Dukes County

Small-footed Bat (*Myotis leibii leibii*) SR
Hampden County; possible statewide

State Local (SL): long-established breeding or wintering species in the Commonwealth that are restricted to very limited areas. Also included in the term are (1) a few breeding species (Δ) that are somewhat more widespread but nowhere frequent and generally restricted to very specialized habitats, and (2) migratory species (∂) restricted to very limited areas within the Commonwealth in instances in which it is thought the areas involved play a vital role in the survival of the species. The following 39 species are placed in this category:

Fish

American Brook Lamprey (*Lampetra appendix*) SL
Blackstone drainage and Mashpee River (only)

Eastern Silvery Minnow (*Hybognathus regius*) SL
Connecticut drainage north of Holyoke Dam

Amphibians

Jefferson Salamander (*Ambystoma jeffersonianum*) SL
Connecticut River Valley and central Berkshire County

Spotted Salamander (*Ambystoma maculatum*) SLΔ
Statewide except Dukes and Nantucket Counties

Four-toed Salamander (*Hemidactylum scutatum*) SLΔ
Statewide except unrecorded from Nantucket, Hampden and Suffolk Counties

Northern Spring Salamander (*Gyrinophilus p. porphyriticus*) SL
Occurs mainly west of the Connecticut River; isolated records from the Holyoke Range and Worcester and Middlesex Counties

Reptiles

Spotted Turtle (*Clemmys guttata*) SLΔ
Small populations scattered statewide

Wood Turtle (*Clemmys insculpta*) SLΔ
Statewide except Dukes, Nantucket and possibly Barnstable Counties

Blanding's Turtle (*Emydoidea blandingi*) SL
Local stations in Bristol, Essex, Middlesex and Worcester Counties

Eastern Worm Snake (*Carphophis amoenus amoenus*) SL
Lower Connecticut River Valley (Hampden and Hampshire Counties)

Black Rat Snake (*Elaphe obsoleta obsoleta*) SL
Worcester, Franklin, Hampden and Hampshire Counties

Birds

Leach's Storm-Petrel (*Oceanodroma leucorhoa*) SL
Nests only at Penikese Island, Dukes County

Little Blue Heron (*Florida caerulea*) SL
Known to nest, formerly at least, at Clark's Island, Duxbury and House Island, Manchester

Great Egret (*Casmerodius albus*) SL
Known to nest, formerly at least, at Clark's Island, Duxbury and House Island, Manchester

Least Bittern (*Ixobrychus exilis*) SL
Breeding distribution poorly known, but believed to be centered locally in Essex and Middlesex Counties; also Plymouth County

American Bittern (*Botaurus lentiginosus*) SLΔ
Nests statewide in suitable habitat

Marsh Hawk (*Circus cyaneus*) SL
Nests mainly in Barnstable, Nantucket and Dukes Counties

Osprey (*Pandion haliaetus*) SL
Nesting is possibly anywhere in the state, but present distribution concentrated in Bristol, Barnstable and Dukes Counties

American Oystercatcher (*Haematopus palliatus*) SL
Nests in Nantucket, Barnstable and Dukes Counties

Upland Sandpiper (*Bartramia longicauda*) SL
Breeds at widely-scattered locales; recent sites include Bridgewater, Agawam, Hadley, Newburyport, Granby, Ludlow, and possibly Ipswich and Marshfield

Willet (Catoptrophorus semipalmatus) SL
Nesting recorded at Plum Island, Essex County; Monomoy Island and Sandy Neck, Barnstable County; and at Duxbury Beach, Plymouth County

Red Knot (Calidris canutus) SL∂
Narrowly restricted during migration to tidal flats at Scituate and Chatham

Laughing Gull (Larus atricilla) SL
Nests only at Monomoy Island, Chatham, Barnstable County

Common Tern (Sterna hirundo) SLΔ
Nests mainly at sites in Essex, Plymouth and Barnstable Counties

Barn Owl (Tyto alba) SL
Nests sparingly in the Connecticut Valley north of Amherst and Hadley and in Barnstable and Dukes Counties

Short-eared Owl (Asio flammeus) SL
Nests in Nantucket, Dukes and Barnstable Counties

Olive-sided Flycatcher (Nuttallornis borealis) SL
Nests in Berkshire, Franklin and north Worcester Counties

Purple Martin (Progne subis) SL
Nesting populations established locally in Essex and Plymouth Counties

Swainson's Thrush (Catharus ustulatus) SL
Nests in northern Berkshire County only

Worm-eating Warbler (Helmintheros vermivorus) SLΔ
Breeds at widely-scattered locales with recent records from Hampden, Hampshire, Berkshire and Essex Counties

Blackpoll Warbler (Dendroica striata) SL
Nests in northern Berkshire County (Mount Greylock) only

Mourning Warbler (Oporornis philadelphia) SL
Nests in northern Berkshire County only

Grasshopper Sparrow (Ammodramus savannarum) SLΔ
Nests statewide but restricted principally to airfields, powerlines and other areas of expansive grasslands; formerly a common grassland species

Henslow's Sparrow (Ammodramus henslowii) SL
Sporadic nesting records throughout the Commonwealth

Vesper Sparrow (Pooecetes gramineus) SLΔ
Nests statewide but restricted to specialized grasslands

Mammals

Long-tailed Shrew (Sorex dispar dispar) SL
Berkshire County only

Water Shrew (Sorex palustris albibarbis) SL
Recorded from Berkshire, Franklin and Worcester Counties

Beach Meadow Mole (Microtus pennsylvanicus breweri) SL
Restricted to Muskeget Island, Nantucket County

Bog Lemming (Synaptomys cooperi) SL
Recorded from Hampshire, Worcester and Plymouth Counties; probably elsewhere in areas of suitable habitat

SECTION III

PERIPHERAL SPECIES

As explained in the introduction, these species reach the limits of their normal breeding distribution in Massachusetts but are weakly established and are not believed to breed in the Commonwealth every year. Some of these species may be undergoing cyclical range fluctuations and may appear and disappear unpredictably. Others may represent the leading edge of permanent range expansions. Most of the species listed here are probably encountering deficiencies in the quantity or quality of habitat suitable to their needs in the Commonwealth.

Management potential is considered rather limited for these species since their ultimate status in Massachusetts is controlled more by natural events than by man-directed activities. The following 15 species are placed in this category.

Birds

Louisiana Heron (*Hydranassa tricolor*)
Nesting record for House Island, Manchester, Essex County

Sharp-shinned Hawk (*Accipiter striatus*)
Nests unpredictably at scattered mainland stations

Cooper's Hawk (*Accipiter cooperii*)
Nests unpredictably at scattered mainland stations

Wilson's Phalarope (*Steganopus tricolor*)
Nesting recorded at Plum Island, Essex County, and Monomoy Island, Barnstable County; range expansion underway

Black Skimmer (*Rynchops niger*)
Nesting recorded for Monomoy Island, Barnstable County, and Plymouth Beach, Plymouth County

Red-bellied Woodpecker (*Melanerpes carolinus*)
Sporadic nesting records throughout the Commonwealth

Red-headed Woodpecker (*Melanerpes erythrocephalus*)
Sporadic nesting records throughout the Commonwealth

Acadian Flycatcher (*Empidonax virescens*)
Nesting records confirmed for Scituate, Middleboro and possibly Northampton towns

Short-billed Marsh Wren (*Cistothorus platensis*)
Sporadic nesting records throughout the Commonwealth

Gray-cheeked Thrush (*Catharus minimus*)
Bred, at least formerly, atop Mount Greylock, Berkshire County; in recent years, nesting sporadic or absent

Ruby-crowned Kinglet (*Regulus calendula*)
Breeds occasionally in northern Berkshire County

Hooded Warbler (*Wilsonia citrina*)
Breeds occasionally in southern Bristol County

Rusty Blackbird (*Euphagus carolinus*)
Breeds occasionally in northern Berkshire County

Lincoln's Sparrow (*Melospiza lincolnii*)
Breeds occasionally in northern Berkshire County

Mammals

Hoary Bat (*Lasiurus cinereus*)
Migratory; may occur statewide; reported from widely scattered locations throughout the Commonwealth